CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. 96-012

REISSUANCE OF WASTE DISCHARGE REQUIREMENTS FOR:

MAINTENANCE DREDGING AND SEDIMENT HANDLING AND DISPOSAL AT PORT SONOMA MARINA

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter the Board) finds that:

1. Desert Aggregates, Incorporated, (hereinafter the Discharger) submitted a Report of Waste Discharge, dated October 16, 1995, for discharge from its sediment handling and disposal facility, hereinafter the Site. The Discharger proposes to use ponds adjacent to Port Sonoma Marina for drying material dredged from the marina.

2. These Waste Discharge Requirements supersede Order No. 78-10, dated February 21, 1978, and subsequent Amendments, Resolution 89-129, dated July 19, 1989, and Order No. 92-081, dated July 15, 1992. Prior to 1992, the Requirements were for marina maintenance dredging only and did not address the operation of a long-term sediment handling facility (addressed by the subsequent Order No. 92-081). This former Order was issued to Venture Corporation for handling sediment brought to the facility from dredging locations throughout the Bay, as well as the Marina. Venture Corporation subsequently went bankrupt in 1994.

3. The facility is located at Port Sonoma Marina at the mouth and eastern bank of the Petaluma River on San Pablo Bay. The facility is on property owned by the Discharger. The sediment drying and disposal facility consists of four ponds, subdivided from the two ponds referenced in the former Order.

4. The Discharger may handle sediments which are non-hazardous but have been found to be unacceptable for unconfined aquatic disposal.

5. Discharge of effluent (i.e., supernatant, decant water or return-flow water) takes place at three weirs located on Ponds 1, 2, and 3 (Attachment B). The facility is designed to discharge an average of 325,000 gallons per day of effluent. The design flow for the facility is 1.3 million gallons per day.

6. Sediment resulting from dredging the Discharger's marina will be pumped hydraulically to the ponds and will have a high water content. When the ponded material is sufficiently dry, it is turned to further promote drying to below 80% moisture content. At this stage, it is dry enough to be trucked to

Redwood Landfill for use as cover material. The Site is located in an area that is subject to high evaporation rates.

7. Sediments from the ponds are tested prior to transport for upland disposal. No sediment will be accepted which is hazardous waste by California Code of Regulations, Title 22, Criteria.

8. These requirements are for the discharge of effluent from dredge material handling and disposal operations. The Discharger is a drying/rehandling facility for dredged sediments destined for upland disposal.

9. These requirements also address placement of sediment resulting from routine maintenance dredging at the Discharger's marina. The Discharger proposes to dredge approximately 60,000 cubic yards per year from the marina. Marina sediments will be placed in one of the four drying ponds on a year-round basis, with the majority of sediment placed in Pond 1 between October and March. A report, submitted by the Discharger (Treadwell and Rollo, August 1995), provides plans developed for a dredging/drying cycle, pond-by-pond. (See Table 2 in Attachment C for schedule.)

10. The Board adopted a revised Water Quality Control Plan for the San Francisco Basin (Basin Plan) on June 21, 1995. The Basin Plan identifies beneficial uses and water quality objectives for surface and groundwaters in the region, as well as effluent limitations and discharge prohibitions intended to protect beneficial uses. The requirements of this document are consistent with that Plan.

11. The beneficial uses of the San Pablo Bay are:

    a. Water contact recreation
    b. Non-contact water recreation
    c. Warm and cold water habitat
    d. Wildlife habitat
    e. Marine habitat
    f. Preservation of rare and endangered species
    g. Fish Migration and spawning
    h. Navigation
    i. Preservation of rare and endangered species
    j. Fish spawning
    k. Estuarine Habitat

12. The action to adopt waste discharge requirements for this facility is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with Section 15304, Title 14, California Administrative Code.

13. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements.

14. The Board, in a public meeting, heard and considered all the comments pertaining to the discharge.

IT IS HEREBY ORDERED that Desert Aggregates, Port Sonoma Marina, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The direct discharge of wastes (including dredged sediments) to surface waters or surface water drainage courses is prohibited.

2. The discharge shall not cause degradation of any water supply.

3. The discharge shall remain within the designated disposal area at all times.

4. The dredge and disposal shall not cause a nuisance as defined in Section 13050(m) of the California Water Code.

B. Specifications

1. At no point within a containment area or cell shall the elevation of sediment exceed that of the levees, berms or other containment structures.

C. Effluent Limitations

1. Wastewater (decant water, return water) discharged from the ponds at the previously described weirs shall not exceed the following limits of quality at any time:

(i)	pH:	6.5 - 8.5
(ii)	Settleable matter:	1.0 ml/hr
(iii)	Dissolved sulfide:	0.1 mg/l

D. Receiving Water Limitations

1. The dredging and/or disposal of waste (i.e., sediments) shall not cause:

   a. Floating, suspended or deposited macroscopic particulate matter or foam in waters of the State at any place more than 100 feet from the dredge or point of discharge of the return flow;

   b. Bottom deposits or aquatic growth in waters of the State at any place;

c. Alteration of apparent color beyond present natural background levels in waters of the State at any place more than 100 feet from the dredge or points of discharge of the return flow;

d. Visible floating, suspended, or deposited oil or other products of petroleum origin in waters of the State at any place;

e. Waters of the State to exceed the following quality limits at any point:

Dissolved Oxygen	5.0 mg/l minimum When natural factors cause lesser concentrations, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
Dissolved Sulfide	0.1 mg/l maximum.
pH	A variation of natural ambient pH by more than 0.2 pH units.
Toxic or other deleterious substances	None shall be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

2. Turbidity of the waters of the State at any point beyond the 100 feet of the discharge of the return flow shall not increase above background levels by more than the following:

Receiving Waters Background	Incremental Increase
<50 units	5 units, maximum
50-100 units	10 units, maximum
>100 units	10% of background, maximum

3. The groundwater shall not be degraded as a result of the sediment disposal and handling operation.

E. Provisions

1. The discharge of silt, sand, soil, clay or other earthen materials from dredging, construction or any other on-shore operation in quantities sufficient to cause deleterious bottom deposits or turbidity or discoloration in excess of natural background levels in surface waters is prohibited.

2. Dredging operations shall cease immediately whenever violations or requirements are detected through implementation of the Self-Monitoring Program (SMP) and operations shall not resume until alternative methods of compliance are provided. The Discharger shall notify the Regional Board immediately whenever violations are detected and operations shall not resume until the Executive Officer of the Regional Board staff has approved the corrective action plan that will provide alternative methods of compliance.

3. The Discharger shall file with the Regional Board monthly self-monitoring reports performed according to the attached Self-Monitoring Program issued by the Executive Officer or any subsequent revision.

4. The Discharger shall submit copies of all sediment testing and analyses results to the Regional Board for approval prior to transport to the upland disposal site.

5. The Discharger shall ensure that the foundation of the site, the levees surrounding the site, and the structures which control leachate, decant water, or surface drainage, are designed, constructed and maintained to withstand conditions generated during the maximum probable earthquake.

6. The Discharger shall install any additional leachate monitoring devices required to fulfill the terms of any Self-Monitoring Program issued to the Discharger in order that the Board may evaluate compliance with the conditions of this order.

7. The discharge of any hazardous, designated or non-hazardous waste as defined in Title 23, Division 3, Chapter 15 of the California Administrative Code, to the disposal site is prohibited. Only dredged material that has been demonstrated to be non-hazardous may be discharged to the disposal site.

8. The Discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.

9. The Discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries of the disposal areas or the ownership of the site.

10. The Discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.

11. The property owner and site operator is considered to have full responsibility for correcting any and all problems which arise in the event of a failure resulting in an unauthorized release of waste or wastewater.

12. The Discharger shall maintain all devices or designed features installed in accordance with this Order such that they function without interruption for the life of the operation.

13. The ultimate off-site disposal of the dried dredge material is subject to the approval of the Executive Officer. This approval shall be based upon a demonstration that the ultimate disposal will occur at a site which has Waste Discharge Requirements (WDR) from this Regional Board or a site that has received a waiver of WDR's.

14. The Discharger shall permit the Regional Board or its authorized representative, upon presentation of identification:

    a. Entry onto the premises on which wastes are located or in which records are kept.

    b. Access to copy any records required to be kept under the terms and conditions of this Order.

    c. Inspection of any treatment equipment, monitoring equipment or monitoring method required by this Order.

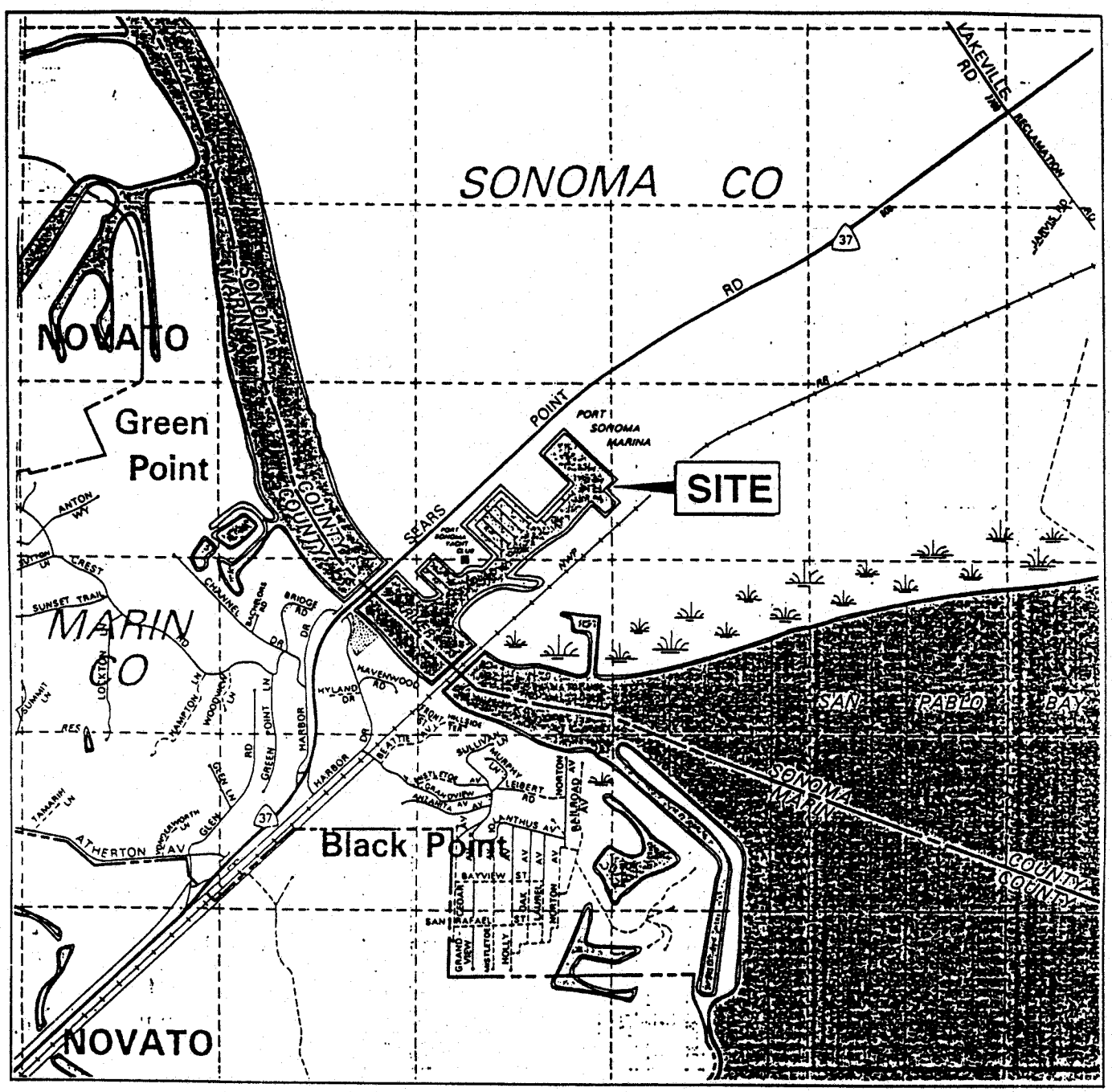
    d. Sampling of any discharge or surface water covered by this Order.

15. This Order does not remove liability under federal, state or local laws, regulations or rules of other programs and agencies nor does this Order authorize the discharge of wastes without appropriate permits from other agencies or organizations.

I, Loretta Barsamian, Executive Officer, do hereby certify that the foregoing is a full, complete and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on January 17, 1996.

for
LORETTA K. BARSAMIAN
EXECUTIVE OFFICER

Attachments:
A: Site Map
B: Site Map
C: Dredging/rehandling schedule
D: Self-Monitoring Program (SMP)



VICINITY MAP

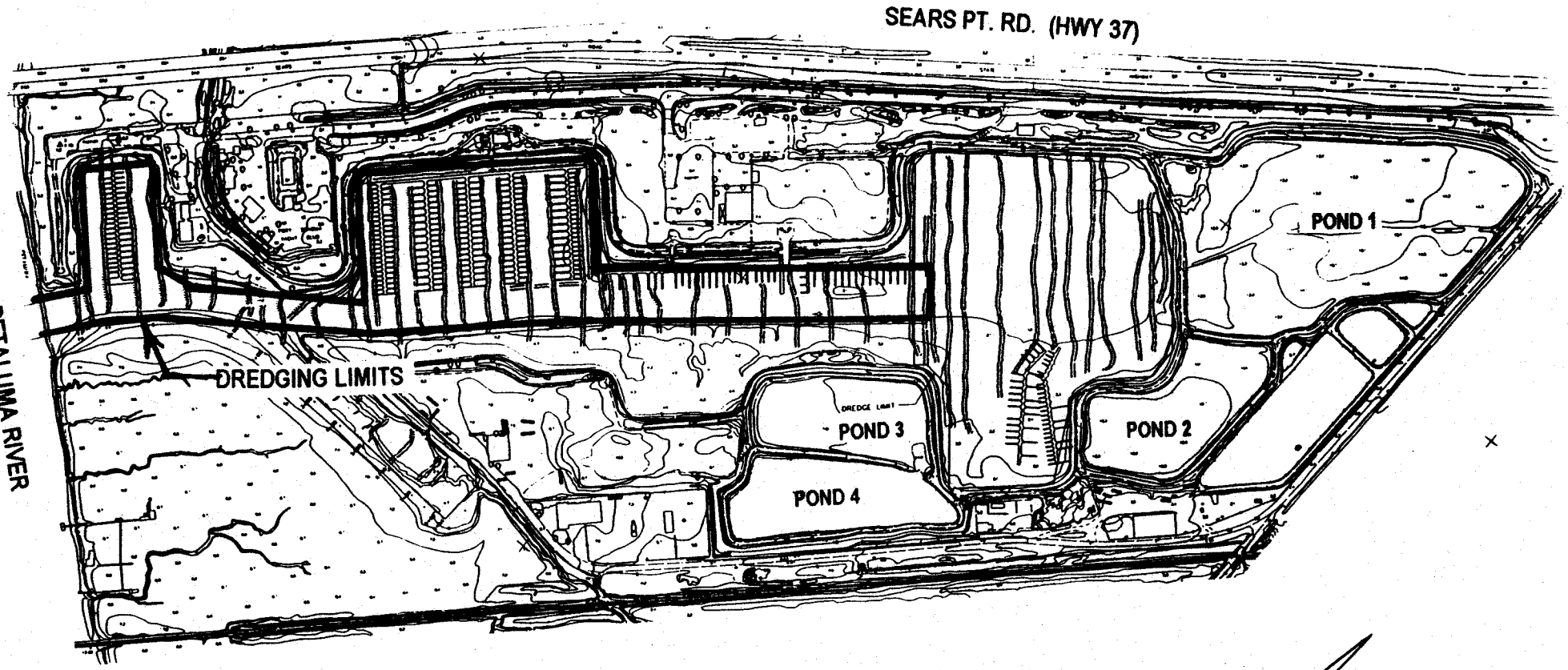
0 1/2 Mile

Approximate scale

PURPOSE: maintenance dredging
QUANTITY: 60,000 cy/yr
ADJACENT PROPERTY OWNERS: See application
DATUM: MLLW

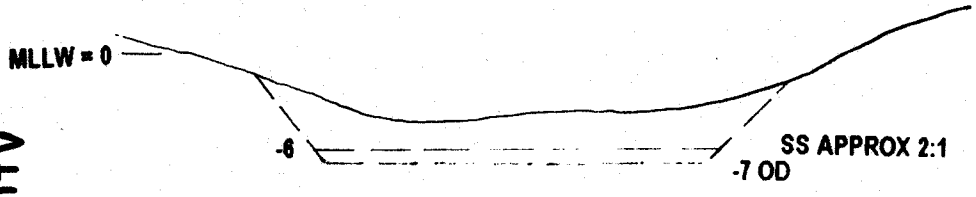
PROJECT: Port Sonoma marina maintenance dredging
APPLIC. BY: Desert Aggregates, Inc.
COUNTY: Sonoma
IN/AT: Petaluma River at Hwy 37 10/13/95 sheet 1 of 2

Attachment A



SITE PLAN

0' 225' 450'



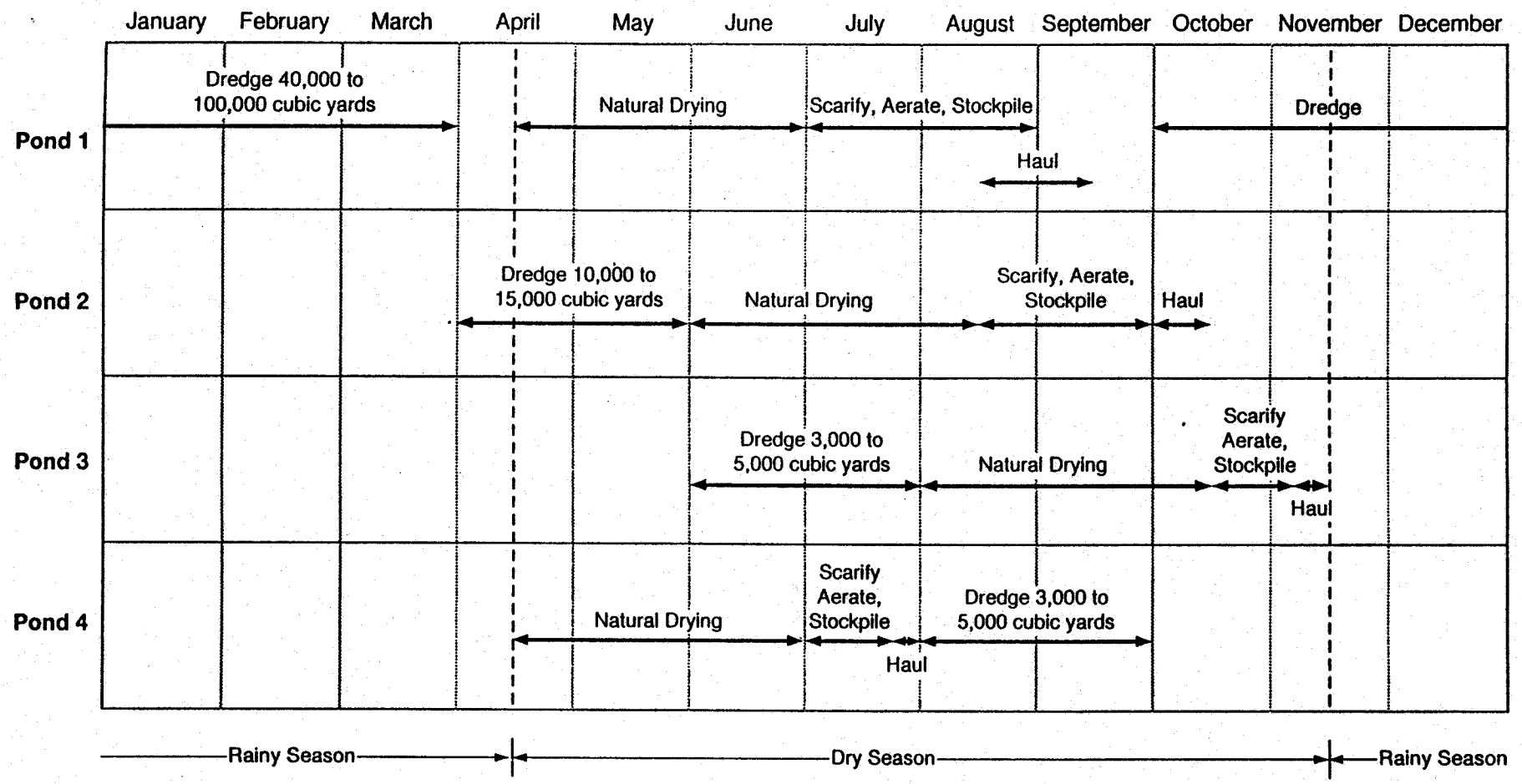
TYPICAL SECTION (NTS)

PURPOSE: maintenance dredging
QUANTITY: 60,000 cy/yr
ADJACENT PROPERTY OWNERS: See application
DATUM: MLLW

PROJECT: Port Sonoma marina maintenance dredging
APPLIC. BY: Desert Aggregates, Inc.
COUNTY: Sonoma
IN/AT: Petaluma River at Hwy 37 10/13/95 sheet 2 of 2

Attachment B

TABLE 2
ANNUAL DREDGING, DRYING, PROCESSING, AND HAULING SCHEDULE
PORT SONOMA MARINA
Petaluma, California



Attachment C

1814.01

CALIFORNIA REGIONAL WATER QUALITY CONTROL PLAN
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR:

DESERT AGGREGATES, INC.,
PORT SONOMA MARINA
SEDIMENT HANDLING AND DISPOSAL

Part A

A. BASIS AND PURPOSE

Reporting responsibilities of waste discharges are specified in Sections 13225(a), 13267(b), 13268, 13383, 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principle purposes of a monitoring program, also referred to as a self-monitoring program, are: 1) to document compliance with Waste Discharge Requirements and prohibitions established by this Regional Board, 2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, 3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and 4) prepare water and waste water quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage and analyses shall be performed according to 40 CFR, S136, or other methods approved and specified by the Executive Officer of this Regional Board (See Part B).

Water and waste-water analyses shall be performed by a laboratory approved for these analyses by the State Department of Health Services (DOHS) or a laboratory waived by the Executive Officer from obtaining a certification for these analyses by the DOHS. The director of the laboratory whose name appears on the certification or his/her laboratory supervisor who is directly responsible for analytical work performed shall supervise all analytical work including appropriate quality assurance/quality control procedures in his or her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. SPECIFICATIONS FOR SAMPLING AND ANALYSES

The Discharger is required to perform sampling and analyses according to the schedule in Part B in accordance with the following conditions:

1. Influent

Composite samples of influent shall be collected on varying days selected at random and shall not include any plant recirculation or other sides stream wastes. Deviation from this must be approved by the Executive Officer.

2. Effluent

a. Composite samples of effluent shall be collected on days coincident with influent composite sampling unless otherwise stipulated. at least one sampling day in each seven shall reflect one day of weekend discharge, one day of peak loading and during major unit operation shutdown or startup. The Executive Officer may approve an alternative sampling plan if it is demonstrated to the EO's satisfaction that expected operating conditions warrant a deviation from the standard sampling plan.

b. Grab samples of effluent shall be collected during periods of maximum peak flows and shall coincide with effluent composite sample days.

c. Fish bioassay samples shall be collected on days coincident with effluent composite sampling.

1) Bioassay test should be performed on effluent samples after chlorination-dechlorination.

2) Total ammonia nitrogen shall be analyzed and un-ionized ammonia calculated whenever fish bioassay test results fail to meet the specified percent survival.

d. If two consecutive samples of a constituent monitored on a weekly or monthly basis in a 30 day period exceed the monthly average effluent limit for any parameter, (or if the required sampling frequency is once per month and the monthly sample exceed the monthly average limit), the sampling frequency shall

be increased to daily until the additional sampling shows that the most recent 30-day move average is in compliance with the monthly average limit.

e. If any maximum daily limit is exceeded, the sampling frequency shall be increased to daily until tow samples collected on consecutive days show compliance with the maximum daily limit.

f. If the final or intermediate results of any single bioassay test indicate a threatened violation (i.e. the percentage of surviving test organisms is less than the required survival percentage), a new test will begin and the discharger shall investigate the cause of the mortalities and report the finding in the next self-monitoring report.

g. Chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, grab samples shall be collected at least every 30 minutes until compliance is achieved.

h. When any type of bypass occurs, composite samples shall be collected on a daily basis for all constituents at all affected discharge points which have effluent limits for the duration of the bypass.

3. **Receiving Waters**

a. Receiving water sampling shall be conducted coincident with composite sampling of effluent.

b. Receiving water samples shall be collected at each station on each sampling day during the period within 1 hour following low slack water. Where sampling at lower slack water period is not practical, sampling shall be performed during higher slack water period. Samples shall be collected within the discharge plume and down current of the discharge point so as to be representative, unless otherwise stipulated.

c. Samples shall be collected within one foot below the surface of the receiving water body, unless otherwise stipulated.

4. Bottom Sediment Samples and Sampling and Reporting Guidelines

a. Bottom sediment sample means: (a) a separate grab sample taken at each sampling station for the determination of selected physical-chemical parameters, or (b) four grab samples collected from different locations in the immediate vicinity of a sampling station while the boat is anchored and analyzed separately for macroinvertebrates.

b. Physical-chemical sample analyses include as a minimum:

1) pH

2) TOC (Total Organic Carbon)

3) Grease analysis:
(a) mg grease per kg sediment, and
(b) percent fraction of hydrocarbon in grease

4) Selected metals (depending on industrial input) mg/kg dry wt. (and soluble metals in mg/l).

5) Particulate size distribution i.e., % sand, % silt-clay

6) Depth of water at sampling station in meters

7) Water salinity and temperature in the water column within one meter of the bottom.

D. STANDARD OBSERVATIONS

1. Receiving Water

a. Floating and suspended materials of waste origin (to include oil, grease, algae, and other macroscopic particulate matter): presence or absence, source, and size of affected area.

b. Discoloration and turbidity: description of color, source, and size of affected area.

c. Odor: presence or absence, characterization, source, distance of travel, and wind direction.

d. Evidence of beneficial water use: presence of water-associated waterfowl or wildlife, fishermen and other recreational activities in the vicinity of the sampling stations.

e. Hydrographic condition:

1) Time and height of corrected high and low tides (corrected to nearest NOAA location for the sampling date and time of sample and collection).

2) Depth of water columns and sampling depths.

f. Weather condition:

1) Air temperatures.

2) Wind - direction and estimated velocity.

3) Total precipitation during the previous five days and on the day of observation.

2. Wastewater Effluent

a. Floating and suspended material of waste origin (to include oil, grease, algae, and other macroscopic particulate matter): presence or absence.

b. Odor: presence or absence, characterization, source, distance of travel.

3. Beach and Shoreline

a. Material of waste origin: presence or absence, description of material, estimated size of affected area, and source.

b. Beneficial use: estimated number of people sunbathing, swimming, water-skiing, surfing, etc.

4. Periphery of Waste Treatment and/or Disposal Facilities

a. Odor: presence or absence, characterization, source, and distance of travel.

b. Weather condition: wind direction and estimated velocity.

E. RECORDS TO BE MAINTAINED

1. Written reports, strip charts, calibration and maintenance records, and other records shall be maintained by the discharger and accessible (at

the waste treatment plant), and retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board or Regional Administrator of the U.S. Environmental Protection Agency, Region IX. Such records shall show the following for each sample:

a. Identity of sampling and observation stations by number.

b. Date and time of sampling and/or observations.

c. Method of composite sampling (See Section G - Definition of Terms).

d. Type of fish bioassay test (96 hour static or flow-through bioassay).

e. Date and time that analyses are started and completed, and name of personnel performing the analyses.

f. Complete procedure used, including method of preserving sample, identity and volumes of reagents used. A reference to a specific section of Standard Methods is satisfactory.

g. Calculations of results.

h. Results of analyses and/or observations.

2. A tabulation shall be maintained showing the following flow data for effluent stations and disposal areas:

a. Total waste flow or volume for each day.

b. Maximum and minimum daily flows for each month.

F. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Spill Reports

A report shall be made of any spill of oil or other hazardous material. Spills shall be reported to this Regional Board, at (510) 286-1255 on weekdays during office hours from 8 AM to 5 PM, and to the Office of Emergency Services at (800) 852-7550 during non-office hours, and the U.S. Coast Guard at (415) 437-3091 (if the spill is into navigable waters) by telephone immediately after occurrence. A written report shall be

filed with the Regional Board within five (5) working days and shall include the following:

1) nature of waste or pollutant,
2) quantity involved,
3) duration of incident,
4) cause of spilling,
5) SPCC Spill Prevention and Containment Plan in effect, if any,
6) estimated size of affected area,
7) nature of effects (e.g., fishkill, discoloration of receiving water, etc.),
8) corrective measures that have been taken or planned and a schedule of these activities, and
9) persons notified.

2. **Reports of Plant Bypass, Treatment Unit Bypass and Permit Violation**

In the event the discharger violates or threatens to violate the conditions of the waste discharge requirements and prohibitions or intends to experience a plant bypass or treatment unit bypass due to:

1) Maintenance work, power failures, or breakdown of equipment, or
2) Accidents caused by human error or negligence, or
3) Other causes, such as acts of nature;

the discharger shall notify the Regional Board office by telephone as soon as the incident is acknowledged and confirm this notification in writing within 7 working days of the telephone notification. The written report shall include time and date, duration and estimated volume of waste bypassed, method used in estimating volume and person notified of the incident. The report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to prevent the problem from recurring.

In addition, the waste discharger shall promptly accelerate the monitoring program to analyze the discharge at least once every day. Such daily analyses shall continue until such time as the effluent limits have been attained, until bypassing stops or until such time as the Executive Officer determines to be appropriate. The results of such monitoring shall be included in the regular Self-Monitoring Report.

3. The discharger shall file a written technical report to be received at least 30 days prior to advertising for bid (60 days prior to construction) on any construction project which would cause or aggravate the discharge of waste in violation of requirements; said reports shall describe the

nature, cost, and scheduling of all action necessary to preclude such discharge. In no case will any discharge of wastes in violation of permit and order be permitted unless notification is made to Executive Officer and approval obtained from the Regional Board.

4. Self-Monitoring Reports

Written reports shall be filed regularly for each calendar month (unless specified otherwise) and filed no later than the fifteenth day of the following month. The reports shall be comprised of the following:

a. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include:

1. Identification of all violations of waste discharge requirements found during the reporting period,

2. Details of the magnitude, frequency, and dates of all violations,

3. The cause of the violations, and

4. Discussion of the corrective actions taken or planned and the time schedule for completion. If the discharger has previously submitted a detailed time schedule for correcting a requirement violation, a reference to the correspondence transmitting such schedule will be satisfactory.

Monitoring reports and the letter transmitting reports shall be signed by a principal executive officer or ranking elected official of the discharger, or by a duly authorized representative of that person.

The letter shall contain the following certification:

"I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge, true, accurate, and complete. I am aware that there are significant penalties for submitting false

information, including the possibility of fine and imprisonment for knowing violations."

b. Compliance Evaluation Summary

Each report shall be accompanied by a compliance evaluation summary sheet prepared by the discharger. The discharger shall prepare the format using those parameters and requirement limits for receiving water and effluent constituents specified in the permit.

c. Map or Aerial Photograph

A map or aerial photograph shall accompany the report showing sampling and observation station locations.

d. Results of Analyses and Observations

Tabulations of the results from each required analysis specified in Part B by date, time, type of sample, detection limit and station, signed by the laboratory director.

1) If the permittee monitors any pollutant more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Self-Monitoring Report.

2) Calculations for all limitations that require averaging of measurement shall utilize an arithmetic mean unless otherwise specified in this permit.

e. Effluent Data Summary

Summary tabulations of the data to include for each constituent total number of analyses, maximum, minimum, and average values for each period. The report format will be the NPDES Discharge Monitoring Report, EPA Form 3320-1. Flow data shall be included. The original is to be submitted to:

Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

f. Flow data

1) The tabulation pursuant to Section F-2.

5. Annual Reporting

By January 30 of each year, the discharger shall submit an annual report to the Regional Board covering the previous calendar year. The report shall contain:

a. Both tabular and graphical summaries of the monitoring data during the previous year.

b. A comprehensive discussion of the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.

c. List of Approved Analyses

1) Listing of analyses for which the discharger is approved by the State Department of Health Services.

2) List of analyses performed for the discharger by another approved laboratory (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).

3) List of "waived" analyses, as approved.

The report format shall be prepared by using the examples shown in Part B.

G. DEFINITION OF TERMS

1. A grab sample is defined as an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading peaks. Its used primarily in determining compliance with daily maximum limits and instantaneous maximum limits. Grab samples represent only the condition that exists at the time the wastewater is collected.

2. A composite sample is defined as a sample composed of individual grab samples mixed in proportions varying not more than plus or minus five percent from the instantaneous rate (or highest

concentration) of waste flow corresponding to each grab sample collected at regular intervals not greater than one hour, or collected by the use of continuous automatic sampling devices capable of attaining the proportional accuracy stipulated above throughout the period of discharge for 8 consecutive or of 24 consecutive hours, whichever is specified in Table 1 of Part B.

3. A flow sample is defined as the accurate measurement of the average daily flow volume using a properly calibrated and maintained flow measuring device.

4. Duly authorized representative is one whose:

   a. Authorization is made in writing by a principal executive officer or ranking elected official;

   b. Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as general partner in a partnership, sole proprietor in a sole proprietorship, the position of plan manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

5. Average values for daily and monthly values is obtained by taking the sum of all daily values divided by the number of all daily values measured during the specified period.

6. Median of an ordered set of values is that value below and above which there is an equal number of values, or which is the arithmetic mean of the two middle values, if there is no one middle value.

   a. A 5-day median value for coliform bacteria is the third highest count of 5 daily counts obtained from 5 consecutive sampling days. A 7-day median value is the fourth highest of 7 daily counts obtained from 7 consecutive sampling days.

   b. A 5-day moving median value for coliform bacteria is the median value calculated for each consecutive sampling day based upon the period from the sample day and the previous 4 sampling days.

c. A 7-day moving median is calculated for each consecutive sampling day based upon the period from the sample day and the previous 6 sampling days. Moving median values for the beginning of the month shall be calculated using the previous month's count (i.e. the last four counts for a 5-day moving median and the last seven counts for a 7-day moving median from the previous month).

7. A 6-month median means a moving median of daily values for any 180 day period in which daily values represent flow-weighted average concentrations within a daily or 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred.

8. The geometric mean is anti log of log mean. Used for determining compliance with bacteriological standards, the log mean is calculated with the following equation:

$$\text{Log Mean} = \frac{1}{N} \sum_{i=1}^{N} \text{Log } C_i$$

in which "N" is the number of days samples were analyzed during the period and "Ci" is the concentration of bacteria (MPN/100ml) found on each day of sampling.

9. Daily Maximum limit is the total discharge in a calendar day for pollutants measured by mass or the average measurement obtained for other pollutants.

10. Instantaneous Maximum is defined as the highest measurement obtained for the calendar day, as determined by a grab sample.

11. A depth-integrated sample is defined as a water or waste sample collected by allowing a sampling device to fill during a vertical traverse in the waste or receiving water body being sampled and shall be collected in such a manner that the collected sample will be representative of the waste or water body at that sampling point.

12. Bottom sediment sampling and reporting guidelines mean those guidelines developed by the Regional Board staff to provide for standard bottom sampling, laboratory, and reporting procedures.

CALIFORNIA REGIONAL WATER QUALITY CONTROL PLAN
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR:

DESERT AGGREGATES, INC.,
PORT SONOMA MARINA
SEDIMENT HANDLING AND DISPOSAL

Part B

This portion of the Self Monitoring Program (SMP) contains terms and definitions specific to the permitted discharge.

A. DESCRIPTION OF SAMPLING STATIONS

1. Points of Discharge

   A1. Pond 1: Located at the point of discharge to the receiving water.

   A2. Pond 2: Located at the point of discharge to the receiving water.

   A3. Pond 3: Located at the point of discharge to the receiving water.

2. Receiving Waters (Return Flow)

   B1. Located at least 100 feet, but not greater than 200 feet from the weirs which drain the ponds.

B. LAND OBSERVATIONS

L1-L20 Visual observations at points equidistant along the perimeter levee not to exceed 1,000 feet spacing.

C. SCHEDULE OF SAMPLING, ANALYSIS AND OBSERVATIONS

1. The following table is to be implemented as a principle part of the SMP and is written specifically for the discharge described in this permit.

TABLE 1. Schedule for sampling, analysis, and observations.

Parameter	Stations A	Stations B	Stations L
Type of sample	Grab	Grab	Observations
Settleable Matter (ml/l-hr)	Daily	Weekly/per Episode	
pH	Daily	Weekly/per Episode	
Dissolved Sulfide (mg/l)	Daily	Weekly/per Episode	
Dissolved Oxygen (mg/l)	--	Weekly/per Episode	
Temperature (°C)		Weekly/per Episode	
Standard Observations			Weekly/per Episode

I, Loretta Barsamian, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 96-012 and was adopted by the Board on January 17, 1996.

This Self-Monitoring Program may be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Discharger, and revisions will be ordered by the Executive Officer or Regional Board.

for LORETTA K. BARSAMIAN
EXECUTIVE OFFICER